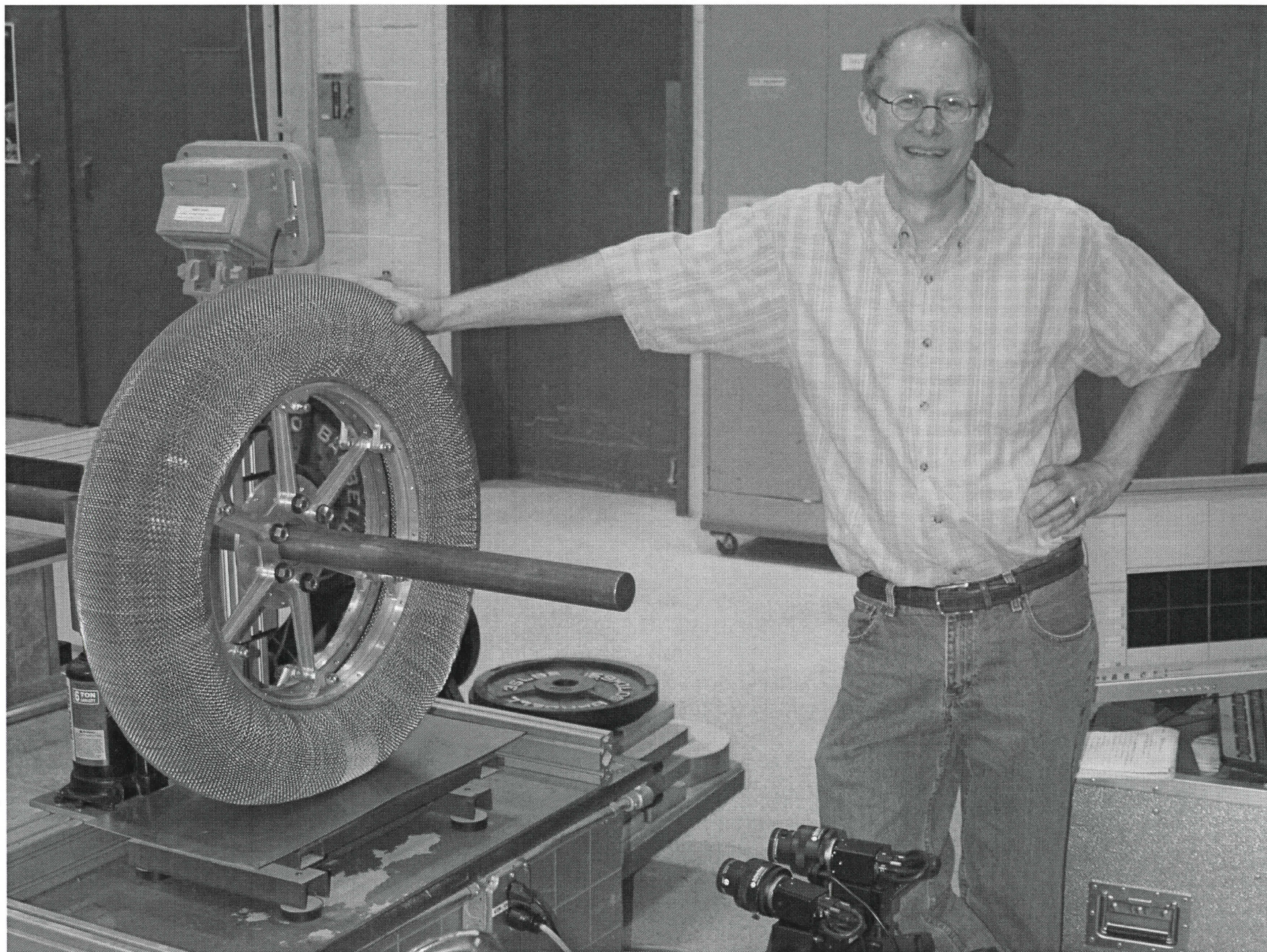
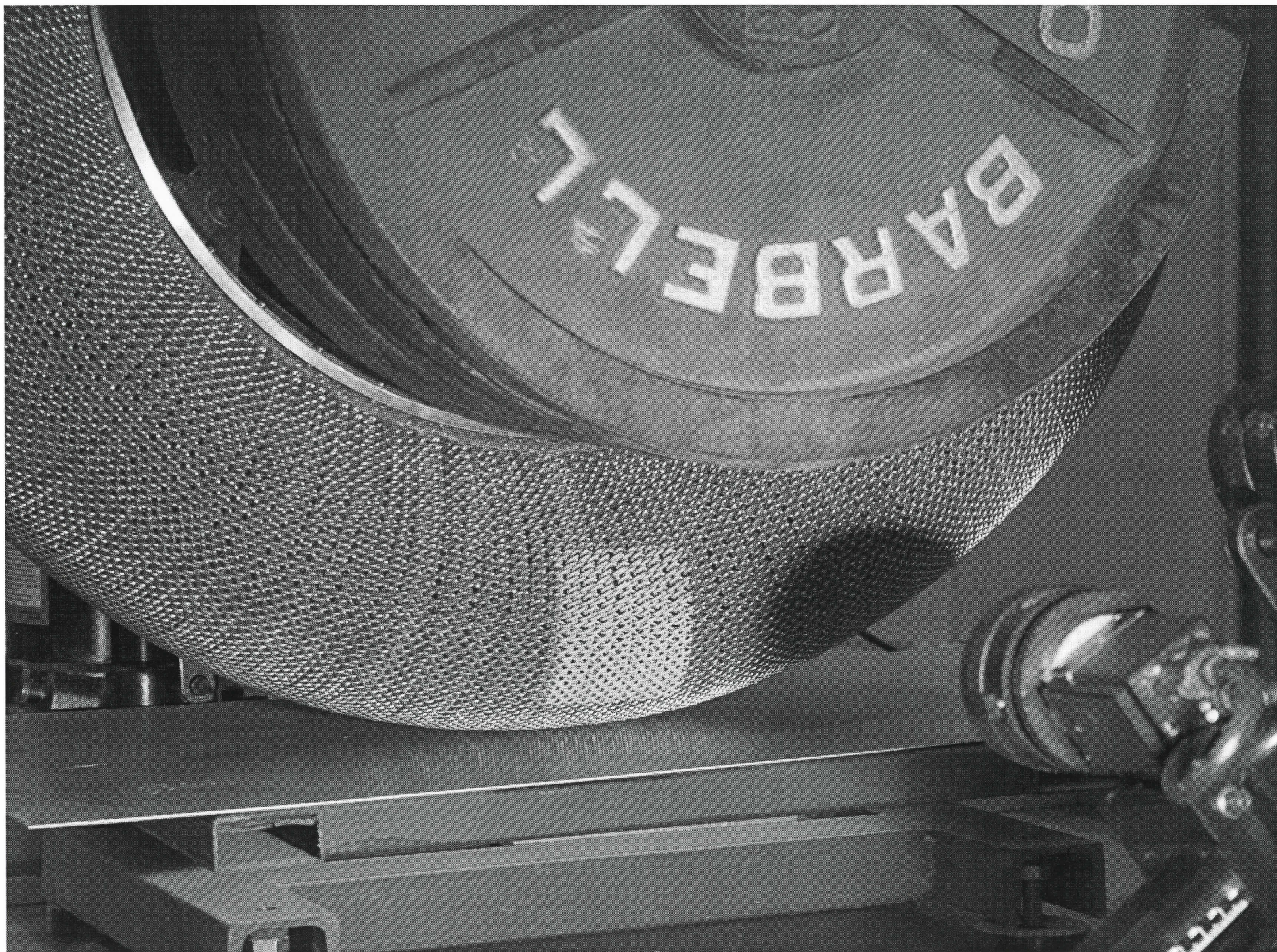
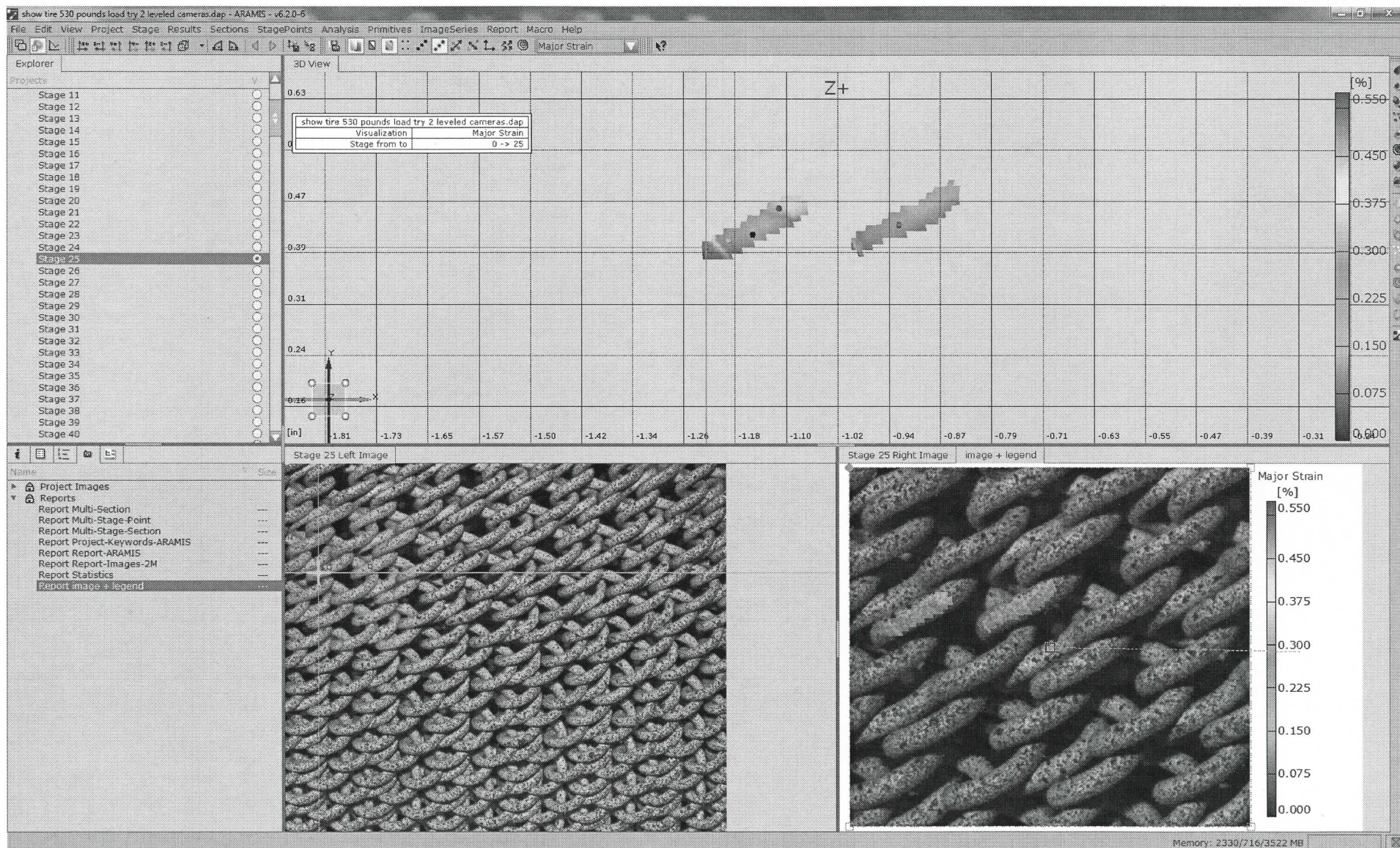


The Space Shuttle, Thirty Years of Flight, Thirty Years of Lessons Learned

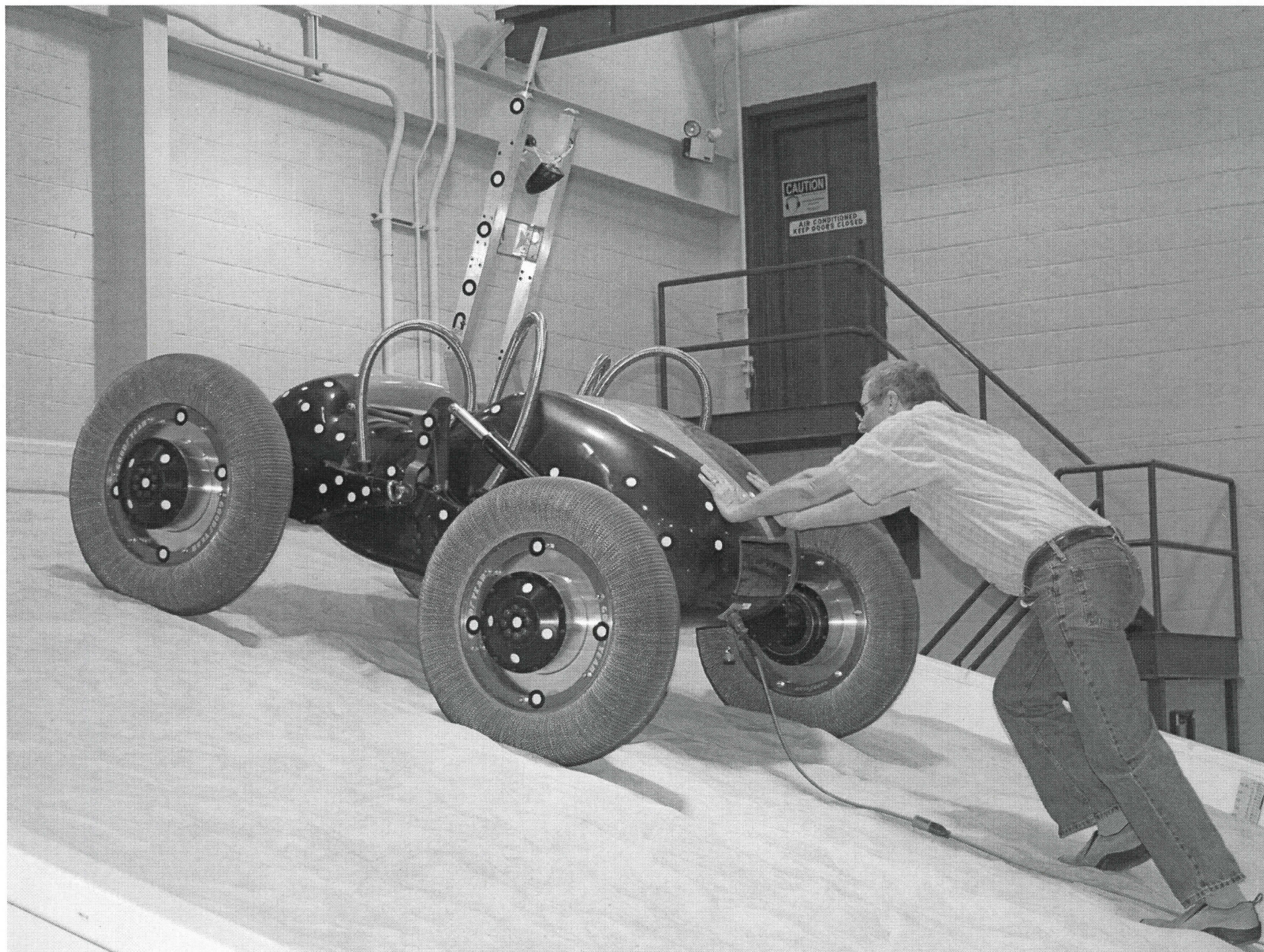
Matthew E. Melis
NASA Glenn Research Center



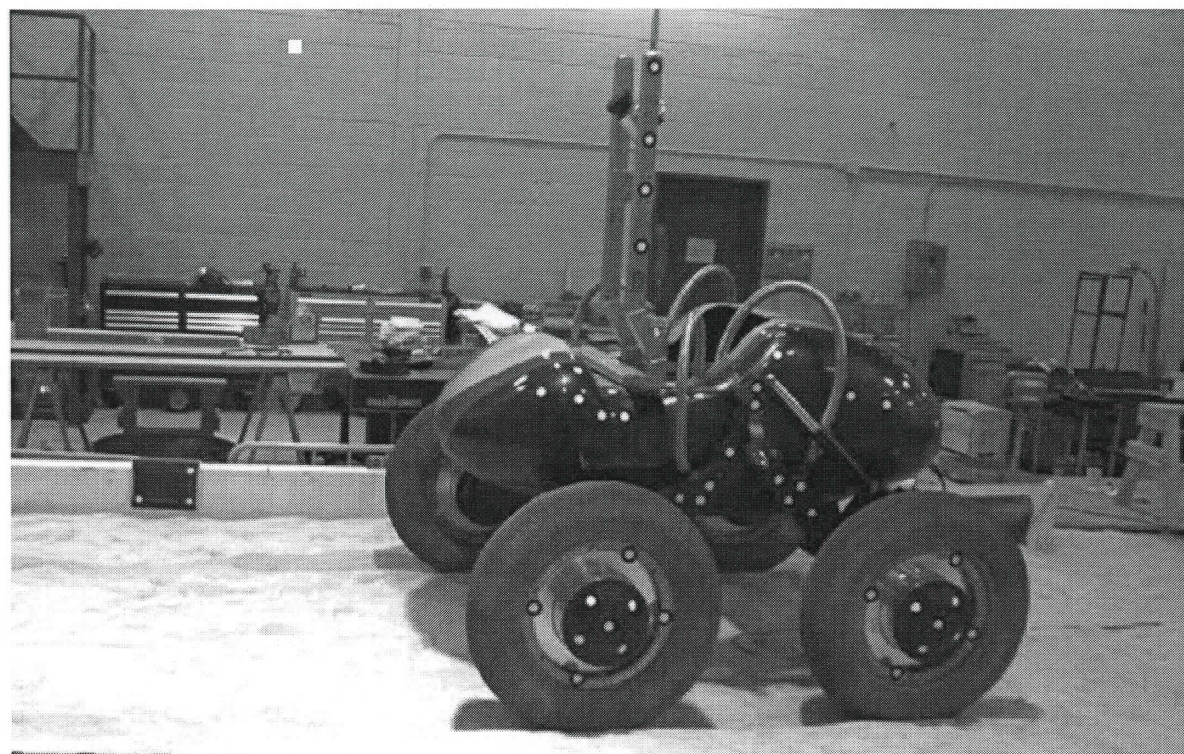




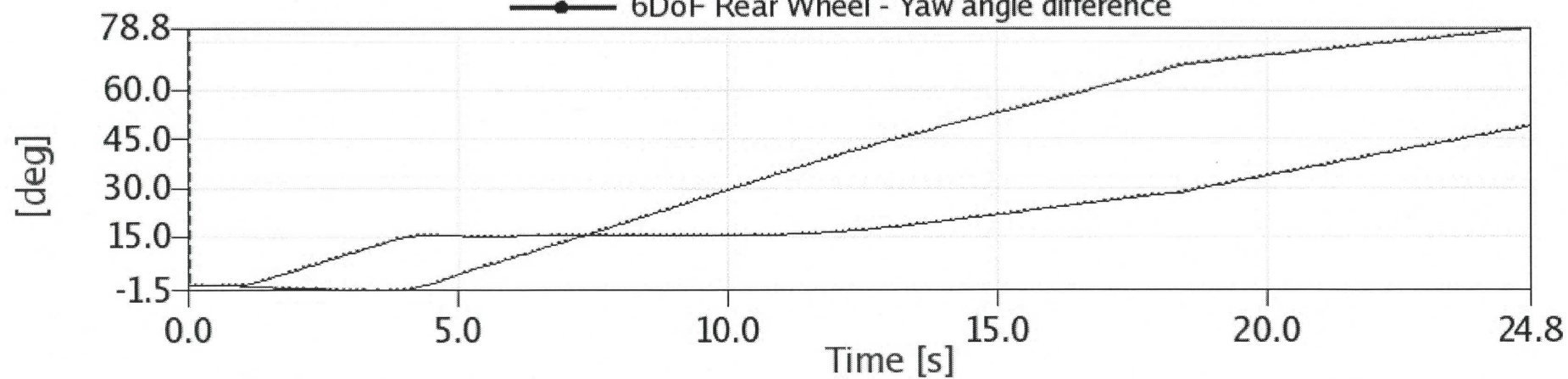




Scarab Inching May 23



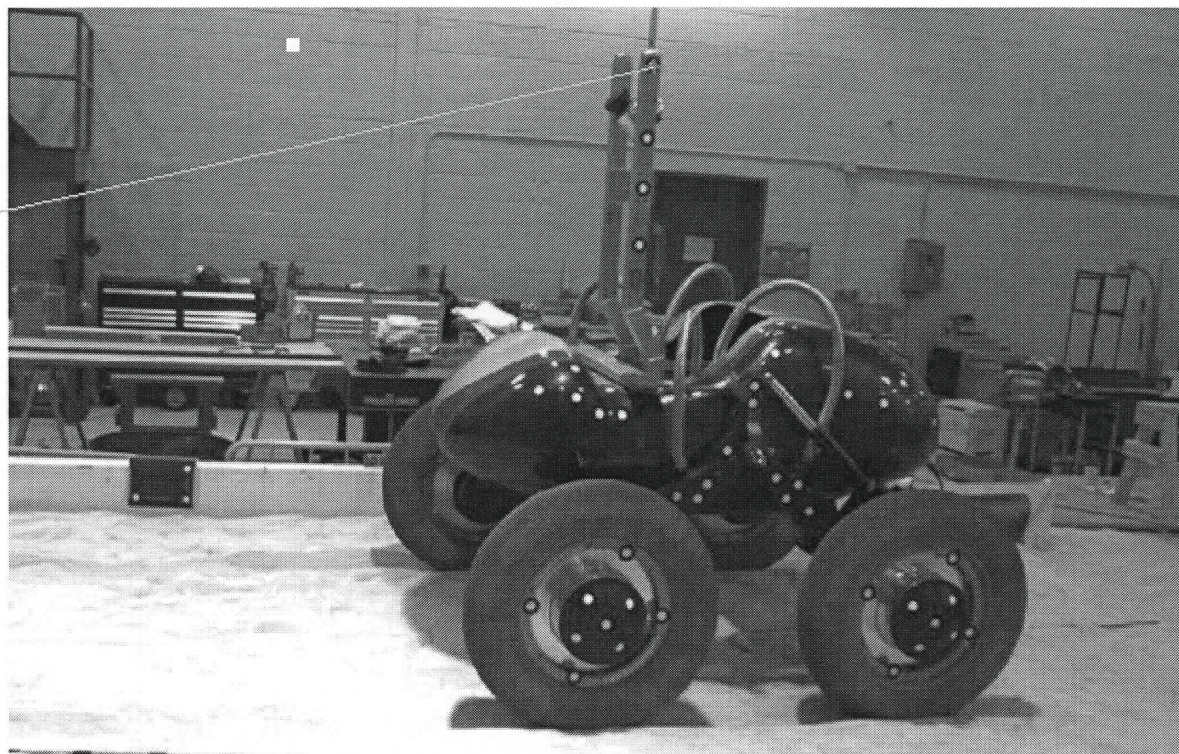
—●— 6DoF Front Wheel - Yaw angle difference
—●— 6DoF Rear Wheel - Yaw angle difference



Scarab Inching May 23

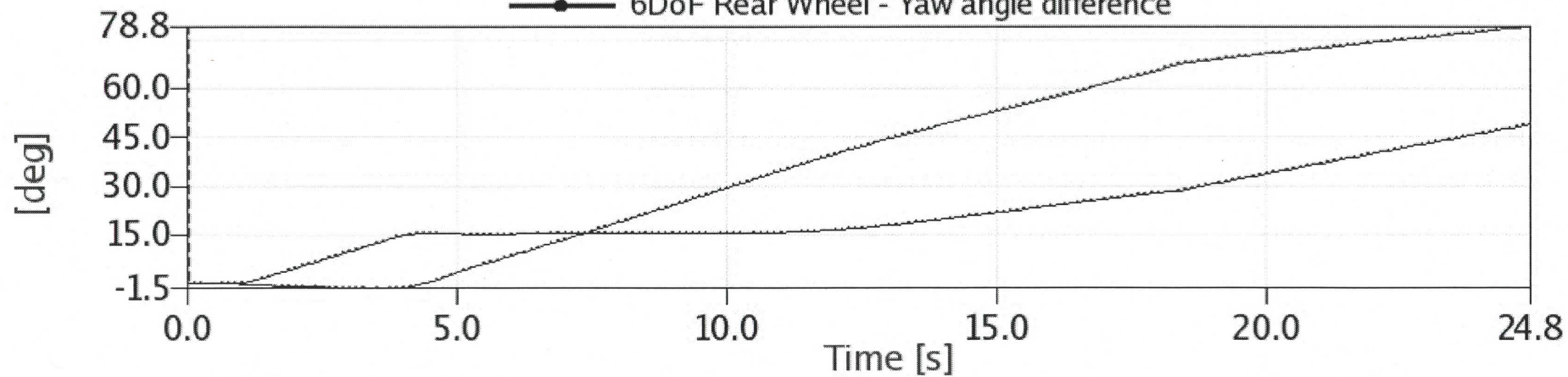
top of mast - Reference

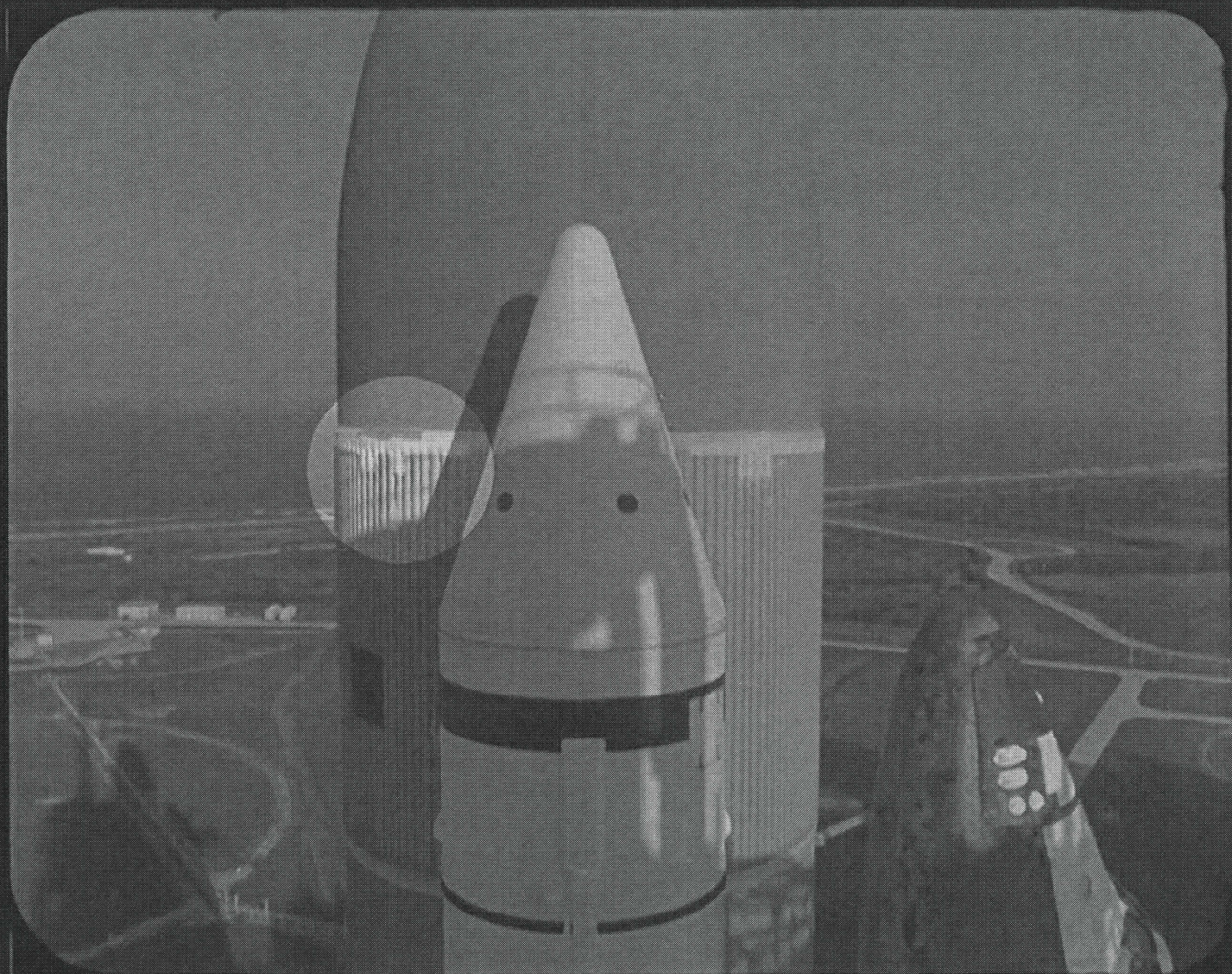
	Diff.
V	+0.0000 in
dX	+0.0000 in
dY	+0.0000 in
dZ	+0.0000 in



—●— 6DoF Front Wheel - Yaw angle difference

—●— 6DoF Rear Wheel - Yaw angle difference





4 3
9 1
2 0
5 3
2 1



A | B | C | D

+ 7 -

+ 6 -

+ 5 -

+ 4 -

+ 3 -

+ 2 -

+ 1 -

0

- 1 -

- 2 -

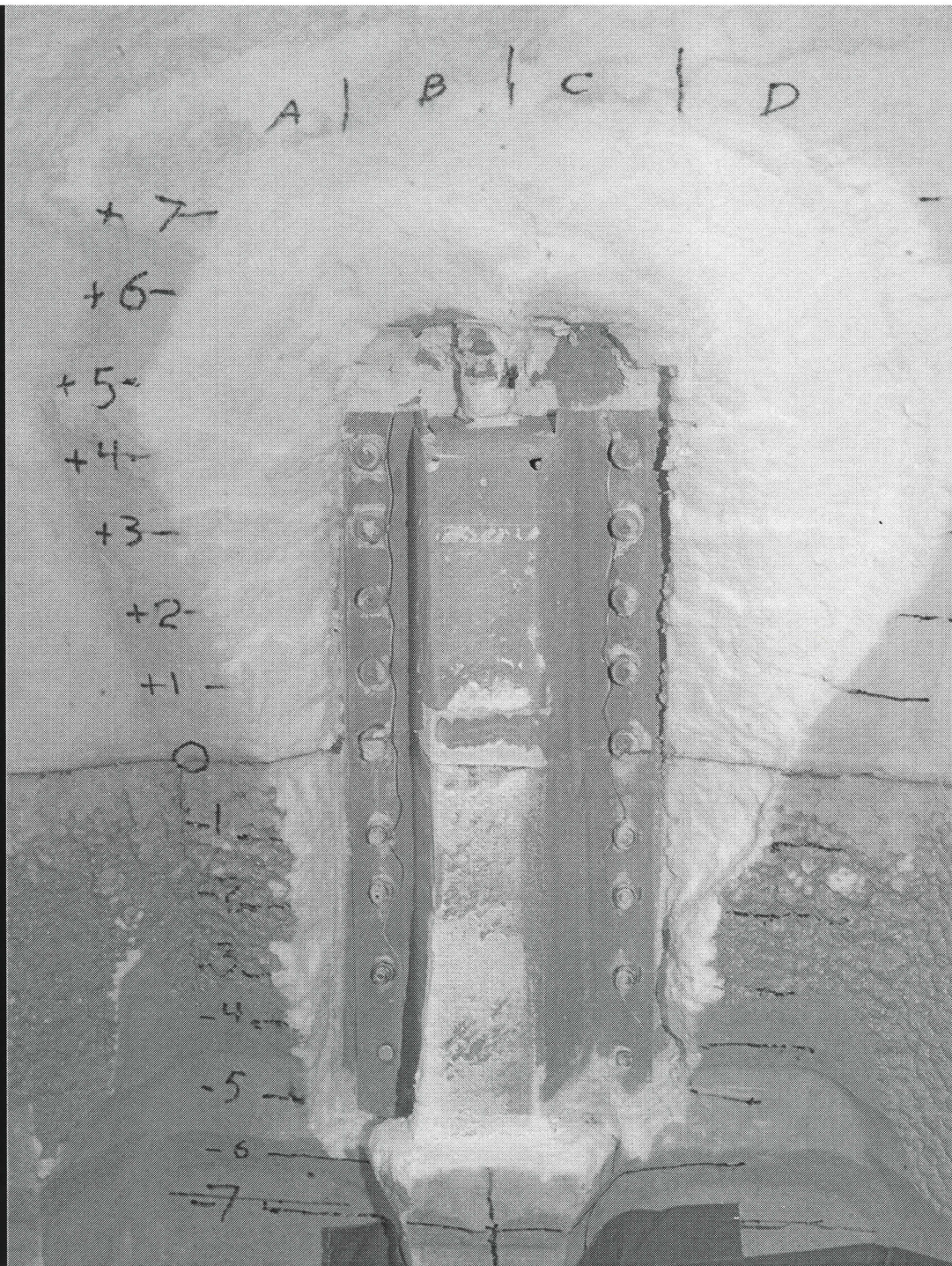
- 3 -

- 4 -

- 5 -

- 6 -

- 7 -



Don't Forget Traceability...

